CONDITIONAL APPROVAL O.U. 5 W.P. ADDENDUM - ADDITIONAL MONITORING WELLS

11/14/91

OEPA/DOE-FO 3 LETTER OU5



State of Ohio Environmental Protection Agency

Southwest District Office

40 South Main Street Dayton, Ohio 45402-2086 (513) 285-6357 FAX (513) 285-6249 2580

George V. Voinovich Governor

November 14, 1991

Re: CONDITIONAL APPROVAL O.U. 5
W.P. ADDENDUM - ADDITIONAL
MONITORING WELLS

Mr. Jack R. Craig Project Manager U.S. DOE FEMP P.O. Box 398705 Cincinnati, Ohio 45239

Dear Mr. Craig:

The purpose of this letter is to conditionally approve the O.U. 5 RI/FS Work Plan Addendum for additional monitoring wells. All proposed well locations are acceptable. The conditions for approval are that DOE address, to Ohio EPA satisfaction, the comments listed below:

- 1. The location of the new monitoring wells and the rational behind their location is acceptable to Ohio EPA. However, this document may indicate that ground water models and hydrogeologic assumptions are being made without the use of site specific hydrogeologic data. It is recommended that DOE supply all results of any slug tests, pump tests, and aquifer material testing to Ohio EPA for review. This document should be prepared in a form which discusses the technical aspects of these tests, and the use of these tests by DOE to characterize the facility.
- Page 1, paragraph 1: Change the work plan to state that the recommendations are also the result of additional information gained during the remedial process.
- 3. Page 1, paragraph 3: Due to the locations and justifications for all the proposed additional wells, DOE should analyze for the full HSL during the initial round of sampling at each well. Background wells should be analyzed for at least all the naturally occurring constituents on the HSL, so that DOE has sufficient background data for the risk assessments.
- 4. Page 1, paragraph 4: a) Define the threshold total uranium content that will determine the need to install deeper wells. b) DOE must make provisions for installing wells if the RI/FS contract laboratory detects concentrations of uranium at or above the pre-determined threshold value (see part a of this comment).

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- 5. Page 6, paragraph 1: It is unknown to Ohio EPA where DOE obtained the "properties of the aquifer". This information should be submitted to Ohio EPA for review.
- 6. Page 6, paragraph 1: DOE does not reference any technical support for the choice of an attenuation value of 12 for uranium at this facility. This information should be submitted to Ohio EPA for review.
- 7. Page 7, paragraph 4: Ohio EPA has not been provided with the site specific hydrogeologic data used for the particle tracking model. This data, and supporting rational for all assumptions should be submitted to Ohio EPA for review.
- 8. Page 7, paragraph 3: The paragraph should discuss the fact that significant contamination has already passed Willey Road forming the South Plume. The text should explain that these wells will monitor for a "different" plume which would lie east of the existing plume.
- 9. Page 8, paragraph 5: The DOE should provide Ohio EPA with any information detailing the condition(s) which make it possible for the flyash (uranium concentration of 150 ppb) to produce concentrations of 900 ppb uranium.
- 10. Page 9, paragraph 6: The "surprising" presence of uranium in well 2120 may represent the inaccuracy of an attenuation factor of 12. Variation in geochemical and/or hydrogeologic conditions may cause the attenuation factor to change throughout the site and throughout time.
- 11. Page 11, paragraph 2: The sentence stating that well 2417 will be placed in an area of known surface soil contamination and the sentence stating that well 2417 will be a "clean downgradient monitoring well" for Plant 6 are contradictory. DOE must discuss the extent of known soil contamination in the area of the proposed well and provide justification for the belief that this will be a "clean" downgradient well.
- 12. Page 14, paragraph 3 and 4: The work plan states that in all four wells at Location 013, a number of couplings between casing sections have deteriorated and are leaking. In the following paragraph, no corrective action is proposed for the 4000 series well. Discuss actions that will be taken to prevent leaking and cross contamination at this well (i.e., proper abandonment).

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13. Page 16, first partial paragraph: For the old administration building well located southwest of the fire training area, provide information about its present condition and plans for proper abandonment or sampling of the well.

If you have any questions about these comments please contact me.

Sincerely,

Graham E. Mitchell Project Manager

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GEM/acn

cc: Kathy Davidson, Ohio EPA
Jim Saric, U.S. EPA
Lisa August, GeoTrans
Ed Schuessler, PRC
Robert Owen, ODH